

ICOM

VHF/UHF DIGITAL TRANSCEIVER

ID-52A

## Multi-Function D-STAR Dual Bander with Waterfall Color Display

The ICOM ID-52A is a dual-band transceiver featuring a color LCD screen. The main screen displays the following information:

- TO:** CQCQCQ
- FROM:** Kirkland 443.575
- Frequency:** 443.000 (PSKIP)
- Mode:** DV D+
- Time:** 10:30

Surrounding the main screen are several inset displays showing different functions:

- NEAR REPEATER (ALL):** Lists nearby repeaters: Kirkland, Bellevue, and Burien, with a distance of 5.3km.
- GPS POSITION:** Shows coordinates (47° 40.13'N, 122° 12.75'W), altitude (94ft), speed (0.5mph), and time (14:05:04).
- Waterfall Display:** Shows a frequency range from 432.600 to 433.400 MHz.
- MENU:** A grid of icons for various functions: VOICE, RECORD, FM RADIO, MEMORY, CD, DV GW, PICTURE, GPS, and SET.
- TX/RX Split Screen:** Shows a color image of a flower (TX) and a color image of a sunset (RX).

The radio's physical controls include a large antenna, a speaker grille, and a control panel with buttons for MENU, MODE SCAN, MAIN DUAL, RX+CS, VFO/MHz CLRCALL, MR MW, and QUICK SPCH.

**Features and Specifications:**

- GPS
- Micro USB
- SPEAKER OUTPUT 750mW
- IPX7
- Micro SD
- VHF/UHF AIRBAND
- COLOR DISPLAY
- Bluetooth®
- D-STAR



# Multi-Function Dual B

## Longer Distance Communication

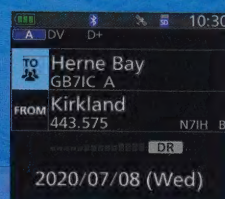
The ID-52A is a VHF/UHF dual bander with D-STAR and FM dual mode functions. The ID-52A supports conventional FM communications as well as D-STAR simplex, repeater, regional, and worldwide calls over the D-STAR Internet gateway. With the ID-52A, you can call a friend in another city, or even internationally through D-STAR repeaters, with digital clear audio. In addition, the ID-52A can send digital voice with data, text messages, GPS location information and pictures.

### Picture Sharing Functions



Share pictures with other users and see received pictures on the color display. Pictures taken on an Android™ device can be wirelessly transferred to the ID-52A through Bluetooth® technology.

### DR (D-STAR Repeater) Function



DR screen

The DR (D-STAR Repeater) expanded function makes D-STAR and FM repeater communication simple. Combined with the GPS function, you can make selection of a local repeater available with a couple of button pushes based on your location. Additionally, the DR mode supports reflector linking controls.

## Advanced Functions and Operat



### 2.3" Large Color Display



Black background



White background

The ID-52A is equipped with a color display. The display size is increased to 2.3 inches, 320 x 280 pixels (1.7 inches for the ID-51A) to achieve excellent viewability. The display background color is selectable from black and white.



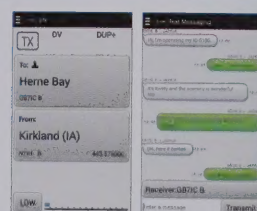
### Bluetooth® Enabled Features



VS-3, Bluetooth® Headset

The optional VS-3 Bluetooth® headset enables hands-free wireless operation. In addition to the PTT and volume up/down

buttons, the VS-3 has 3 programmable buttons that can be assigned functions to improve operability and mobility.



DR setting display example

Text transmission display example

You can easily connect to a smart device through Bluetooth®. The Remote Control Software, RS-MS1A for Android™ device or RS-MS1I for iOS™ device can wirelessly control the ID-52A to change operating frequencies and other settings.

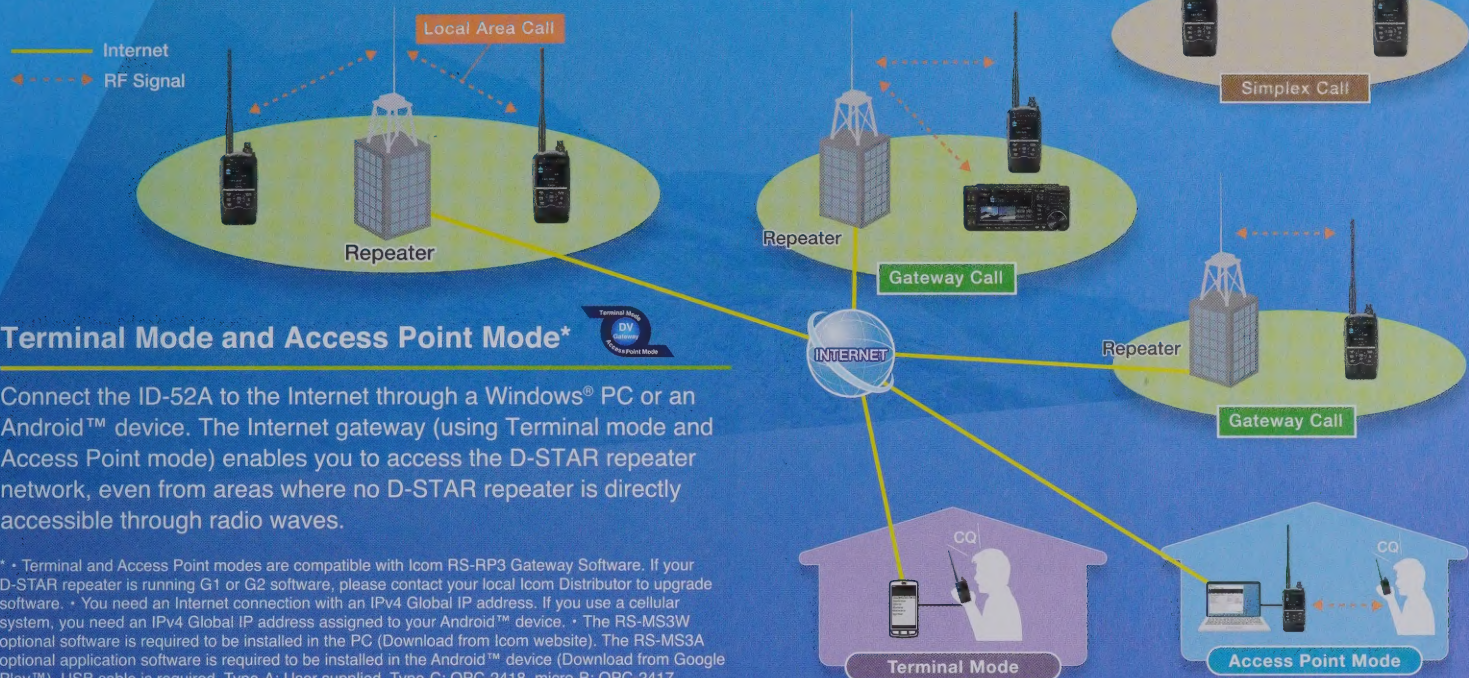
VHF/UHF DIGITAL TRANSCEIVER

# ID-52A



# and D-STAR Transceiver

## Through the D-STAR Network



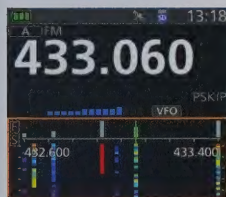
### Terminal Mode and Access Point Mode\*

Connect the ID-52A to the Internet through a Windows® PC or an Android™ device. The Internet gateway (using Terminal mode and Access Point mode) enables you to access the D-STAR repeater network, even from areas where no D-STAR repeater is directly accessible through radio waves.

\* Terminal and Access Point modes are compatible with Icom RS-RP3 Gateway Software. If your D-STAR repeater is running G1 or G2 software, please contact your local Icom Distributor to upgrade software. \* You need an Internet connection with an IPv4 Global IP address. If you use a cellular system, you need an IPv4 Global IP address assigned to your Android™ device. \* The RS-MS3W optional software is required to be installed in the PC (Download from Icom website). The RS-MS3A optional application software is required to be installed in the Android™ device (Download from Google Play™). USB cable is required. Type-A: User supplied. Type-C: OPC-2418. micro-B: OPC-2417.

## ons with Vivid Color Display

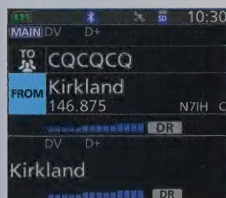
### Handy Radio First! Waterfall Display



Fixed scroll mode

The waterfall display shows not only the existence of signals but also the changes of signal level in chronological order. You will have an overview of the band conditions in more detail, including busy frequencies currently used, or open frequencies not used. The band scope mode is selectable from center mode, Fixed mode and Fixed scroll mode.

### V/V,U/U,V/U Dualwatch Including DV/DV Mode

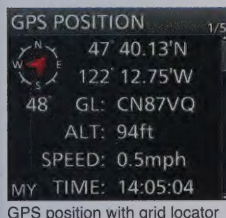


DV/DV mode

The Dualwatch function monitors the VHF/VHF, UHF/UHF and VHF/UHF bands simultaneously\*. You can quickly respond to a call from the Main and Sub bands. Two DV signals can be decoded at the same time.

\* AM/AM mode Dualwatch is not possible. AM signals can be received on only the Main VFO (A band).

### Integrated GPS/GLONASS Receiver



D-PRS mode is supported by the internal GPS receiver for sending your location and showing received station location, distance, and direction from your current location. In addition to your location, the ID-52A displays your current Grid Square information. The GPS position data can be used for Position Auto Reply, Near Repeater Search, and GPS log functions.

### VHF/UHF Airband and FM Broadcast Receiver



Broadcast receiver

Airband reception is expanded from VHF to UHF Military airband (225 to 374.995 MHz). FM broadcast stations can be listened to while using the dualwatch function.

### microSD Card Slot

You can store QSO Recording, TX Voice Memory, pictures, QSOs and GPS log data. Firmware upgrades, Repeater lists and other personal settings onto a microSD card (up to 32 GB). This can be uploaded into the ID-52A radio.

### Micro USB Connector

The ID-52A has a Multi-function USB port as well as USB host function for charging the Icom battery packs, PC programming, read/write contents to the microSD card, Terminal/Access Point mode support, CI-V control as well as audio.

### IPX7 Waterproof and Tough Construction

With Icom's pioneering IPX7 waterproofing and pro-grade construction, the ID-52A is perfect for your shack or operating in harsh outdoor environments.

### Other Features

- 750 mW loud audio output power
- Improved heat dissipation efficiency for stable operation
- DV fast data mode uses data in place of voice frames
- QSO log in CSV data format
- Accessories for the ID-51A/ID-31A such as battery packs and microphones can be used
- DV/FM near repeater search function
- Voice recorder function
- External DC power jack
- Weather channel receive



## ■ SPECIFICATIONS

GENERAL				
	Version	Transmit	Receiver	Broadcast band
Frequency coverage (Unit: MHz)	USA	144–148, 430–450*	(A) 108–174, 225–479* (B) 137–174, 375–479*	88.0–108.0
	(A) means A band, (B) means B band.    Guaranteed range: * 144–148, 440–450 MHz			
Type of emission		F2D, F3E, F7W		
Mode		DV, FM, FM-N, WFM*, AM*, AM-N* (* WFM, AM and AM-N are Rx only)		
Number of memory channels		1000 memory channels, 4 call channels, 50 scan edges, 100 skip channels, 500 broadcast stations, 2500 repeaters, 300 call signs and 300 GPS memories		
Frequency resolution		5, 6.25, 8.33*, 10, 12.5, 15, 20, 25, 30, 50, 100, 125 and 200 kHz * Selectable depending on the operating band.		
Operating temperature range		–20°C to +60°C ; –4°F to +140°F		
Frequency stability		±2.5 ppm (–20°C to +60°C on the basis of 25°C)		
Antenna impedance		50 Ω (SMA)		
Power supply requirement	Battery pack	7.4 V DC (with BP-272), 7.2 V DC (with BP-307)		
	Alkaline cells	5.5 V DC (with BP-273)		
	External DC	10–16 V DC		
Current drain (at 7.4 V DC)	Tx High	Less than 2.5 A		
	Rx AF Max.	Less than 450 mA (DV), Less than 400 mA (FM, FM-N) (Internal SP, 8 Ω)		
Dimensions (WxHxD) (projections not included)		61.1 × 121.6 × 34.8 mm ; 2.4 × 4.8 × 1.4 in (with BP-272)		
Weight (approx.)		330 g ; 11.6 oz (with BP-272 & antenna)		

TRANSMITTER		
Modulation system	DV	GMSK reactance modulation,
	FM, FM-N	FM reactance modulation
Output power (at 7.4 V DC)	5 W, 2.5 W, 1.0 W, 0.5 W, 0.1 W (High, Mid, Low2, Low1, S-low)	
Spurious emissions	Less than –60 dBc (High, Mid), Less than –13 dBm (Low2, Low1, S-low)	
Max. frequency deviation	±5.0/2.5 kHz (FM/FM-N)	
Ext. Mic impedance	2.2 kΩ	

RECEIVER		
Sensitivity	DV	Less than 0.2 μV (at 1% BER)
	FM, FM-N	Less than 0.18 μV (at 12 dB SINAD)
Selectivity	More than 50 dB (DV, FM-N), More than 55 dB (FM)	
Spurious rejection	More than 60 dB	
Audio output power	Internal SP	More than 750 mW (8 Ω load)
	External SP	More than 200 mW (8 Ω load)
Receiver sensitivity (Except amateur bands.)		

	Frequency range (Unit: MHz)	FM/FM-NAWFM (12 dB SINAD)	AM/AM-N (10 dB S/N)
BC band	88.000–108.000	Less than 1 μV (WFM)	–
A band	108.000–136.991	–	Less than 1 μV
	137.000–142.000	Less than 0.18 μV	Less than 1 μV
	142.005–148.000	Less than 0.18 μV	–
	148.005–174.000	Less than 0.32 μV	–
	225.000–259.995	Less than 0.56 μV	Less than 1.8 μV*
	260.000–354.995	Less than 0.32 μV	Less than 1 μV*
	355.000–374.995	Less than 0.5 μV	Less than 1.8 μV*
	375.000–399.995	Less than 0.5 μV	–
B band	400.000–479.000	Less than 0.32 μV	–
	137.000–148.000	Less than 0.18 μV	–
	148.005–174.000	Less than 0.32 μV	–
	375.000–399.995	Less than 0.5 μV	–
	400.000–479.000	Less than 0.32 μV	–

All stated specifications are subject to change without notice or obligation.

\*AM-N mode cannot be received from 225 to 374.995 MHz.

Supplied accessories	• Battery pack, BP-272 • Wall charger, BC-167SA • Antenna, FA-S270C • Belt clip, MB-127 • Hand strap
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\* Supplied accessories may differ depending on the transceiver version.

## ■ OPTIONAL ACCESSORIES

Some options may not be available in some countries. Please ask your dealer for details.

BATTERY PACKS AND CASE			
Battery packs	BP-272	BP-307	BP-273
Type	Rechargeable Li-ion, 7.4 V	Rechargeable Li-ion, 7.2 V	LR6 (AA) batteries ×3
Capacity	1880 mAh (min.) 2000 mAh (typ.)	3050 mAh (min.) 3150 mAh (typ.)	–
Operating time*	7.25 hours (FM mode)	12 hours (FM mode)	–



BP-272 BP-307 BP-273

\* Approximate. Tx: Rx: standby = 1:1:8. Power save function ON. GPS OFF.

## RAPID CHARGER



BC-202IP2  
Charges BP-272/BP-307 in 2.5/4 hours (approx.).

BC-123S<sup>1</sup>  
AC adapter supplied with the BC-202IP2, depending on version.

<sup>1</sup> BC-123SA for USA plug, SE for Europe plug. <sup>2</sup> BC-167SA for USA plug, SD for Europe plug, SV for Australia plug.

## WALL CHARGER



BC-167S<sup>2</sup>

## EARPHONE-MICROPHONES



HM-153LS HM-166LS

## SPEAKER-MICROPHONES

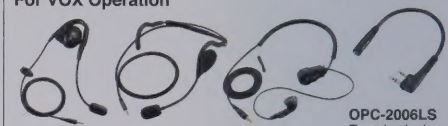


HM-75LS For remote control

HM-183LS Waterproof

HM-186LS

## HEADSETS and PLUG ADAPTER CABLE For VOX Operation



HS-94 Earhook type

HS-95 Neck arm type

HS-97 Throat type

OPC-2006LS  
Required when using any of these headsets

## Bluetooth® HEADSET



VS-3

## CIGARETTE LIGHTER CABLES



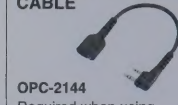
CP-12L  
Built-in noise filter

## DC POWER CABLE



OPC-254L

## PLUG ADAPTER CABLE



OPC-2144  
Required when using any of HM-75A, HM-153, HM-166 or SP-40.

## CARRYING CASE



LC-193

## APPLICATION SOFTWARE\*

- RS-MS1A: Remote control application for Android™
- RS-MS1I: Remote control application for iOS™.
- RS-MS3A: Terminal/Access point mode application for Android™
- RS-MS3W: Terminal/Access point mode software for Windows® PC
- CS-52: Programming software for Windows® PC.
- ST-4001A: Picture Utility Software for Android™
- ST-4001I: Picture Utility Software for iOS™
- ST-4001W: Picture Utility Software for Windows® PC

\* Applications for Android™ can be freely downloaded from Google Play™. Applications for iOS™ can be freely downloaded from the App Store. Software for Windows® PC can be freely downloaded from the Icom website.

## OTHER OPTIONS

- AD-92SMA: SMA-BNC antenna adapter
- FA-S270C: VHF/UHF antenna. Same as supplied
- MB-127: Belt clip. Same as supplied
- SP-40: Earphone (OPC-2144 required.)
- CP-23L: Cigarette lighter cable for BC-202IP2
- OPC-515L: DC power cable for BC-202IP2
- OPC-2417: USB cable (micro B - micro B)
- OPC-2418: USB cable (Type C - micro B)

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